

(19) World Intellectual Property  
Organization  
International Bureau



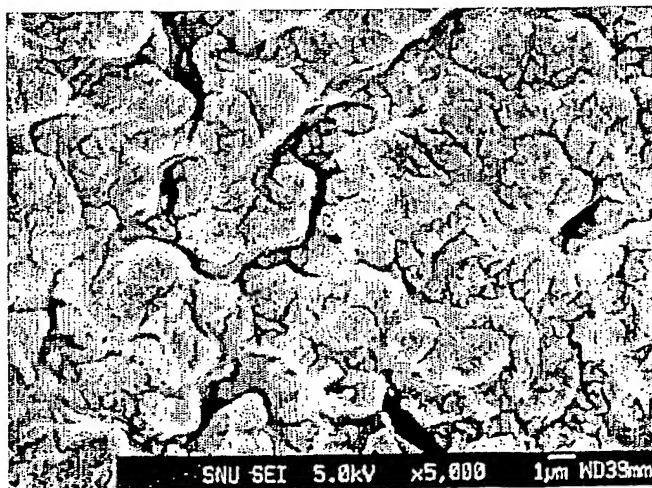
(43) International Publication Date  
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number  
**WO 2005/081646 A2**

- (51) International Patent Classification: Not classified
- (21) International Application Number:  
PCT/KR2005/000525
- (22) International Filing Date: 26 February 2005 (26.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10-2004-0012983  
26 February 2004 (26.02.2004) KR
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POROUS FILM TYPE SOLVENT-FREE POLYMER ELECTROLYTE FILLED WITH OLIGOMER/PREPOLYMER ELECTROLYTE AND SECONDARY BATTERY EMPLOYING THE SAME



(57) Abstract: Provided are a solvent-free polymer electrolyte and a secondary battery employing the same. The solvent-free polymer electrolyte includes: a porous film including a first polymer and a second oligomer, the first polymer being at least one selected from the group consisting of poly(vinylidene fluoride-co-hexafluoropropylene) copolymers, polyvinylidene fluorides, polymethylmethacrylates, polyacrylonitriles, polyethylenes, and celluloses having a polyether chain and the second oligomer being at least one selected from the group consisting of poly(ethylene oxide-co-ethylene carbonate) copolymers with at least one terminal groups substituted by a halogen atom and polyethyleneglycols with at least one terminal groups substituted by a halogen atom; and an electrolyte present in the pores of the porous film and including the second oligomer and a lithium salt. Since the solvent-free polymer electrolyte contains no liquid organic electrolyte, it is not accompanied by problems caused by leakage or

evaporation of an organic solvent, unlike a gel-type polymer electrolyte. Furthermore, the solvent-free polymer electrolyte has enhanced ionic conductivity as compared to a conventional solvent-free polymer electrolyte.